

This is, indeed, a very short catalogue, but I hope it will prove worthy of presentation if it shall serve for the beginning of one more extended; for, on theoretical grounds, I am strongly of the opinion that many more changes of color occur among the stars than have been observed and recorded.

February 17th.

Vice-President BRIDGES in the Chair.

Eighteen members present.

The following was presented for publication:

Catalogue of the N. American Sciænoids. By Theo. Gill.

The Committee on Proceedings laid on the table the published Number for October, November and December, 1862.

February 24th.

The President, Mr. LEA, in the Chair.

Seventeen members present.

On Report of the respective Committees, the following were ordered to be published:

Catalogue of the North American SCIÆNOID Fishes.

BY THEODORE GILL.

Since the publication of the several articles on the Sciænoids of the Eastern Coast of the United States,* the additional facilities which I have enjoyed have enabled me to detect some errors, adopted from previous laborers, in the nomenclature of those species, and I have been also led to propose some modifications in the arrangement of the family itself.†

A. Lower jaw received within the upper (vertebræ 10 | 14
—14 + X.)

B. Teeth of both jaws developed; upper pharyngeal bones three.

C. Lower pharyngeal bones completely separated SCIÆNINÆ.

* Chin smooth.

† Caudal lanceolate; head above very broad, nearly flat between eyes; preoperculum behind crest cavernous and multipartite Stelliferus.

†† Caudal entire or sinuated; head narrow, transversely convex; preoperculum behind crest flat.

1. Body and head oblong, compressed; anal under posterior half of second dorsal. Bairdiella.

2. Body and head elongated; anal under middle of second dorsal. Sciænops.

** Chin with a single moderate barbel. Menticirrhus.

*** Chin with minute filaments. Micropogon.

* Catalogue of the Fishes of the Eastern Coast of North America, pp. 32, 33. (Feb. 14, 1861.)
Revision of the Genera of North American Sciæninæ, in "Proc. Acad. Nat. Sci., Philada.," 1861, pp. 79—89.

On the Liostominae, op. cit., 1861, pp. 89—93.

On the Haplodontinae, op. cit., 1861, pp. 100—105.

† Note on the Sciænoids of California, op. cit., 1862, pp. 16—18.

- CC. Lower pharyngeals firmly united in adult, with
 two oblique inferior processes beneath..... HAPLODONOTINÆ.
 * Chin bearded; caudal subtruncated Pogonias.
 BB. Teeth of upper jaw only persistent LIOSTOMINÆ.
 Body compressed, ovate..... Liostomus.
 AA. Lower jaw even with upper or projecting.....
 B. Vertebrae 14 | 10 OTOLITHINÆ.
 A. Canine teeth in lower jaw; pseudobranchiæ..... Cynoscion.
 BB. Vertebrae 10—11 | 14—15..... LARIMINÆ.
 D. X. I. 24—30..... Larimus.

Subfamily *SCIÆNINÆ* (Bon.) Gill.Genus *STELLIFERUS* (Stark ex Cuv.)

Les Stelliferes Cuv., R. A., 1817, 283.

Stelliferus Stark, El. N. H., i. 459.*

Homoprion Holb., Ich. S. C.

STELLIFERUS LANCEOLATUS Gill ex Holbrook.

Homoprion lanceolatus Holb., 168.

Sciæna lanceolata Günther, ii. 289.

Hab.—South Carolina.

The poor description and figure of Holbrook did not enable me to recognize the generic identity of *Homoprion lanceolatus* with *Stelliferus trispinosus*, of which the examination of specimens has almost convinced me. *H. lanceolatus* has, however, pseudobranchiæ.

Genus *BAIRDIELLA* Gill.*BAIRDIELLA PUNCTATA* Gill ex Linn.

Perca punctatus L., Syst. Nat., ed. 10, i. 482, (No. 4.)

Bodianus argyroleucos Mitchell, Trans. L. and P. Soc. N. Y., i. 417.

“ pallidus Mitchell, op. cit., p. 420; nec *Morone pallida* Mitchell, Rep., p. 18; nec *Labrax pallidus* Dekay, Storer.

Corvina argyroleuca Cuv. et Val., v. 105.

Homoprion xanthurus Holb., 170, pl. 24, (desc. and fig. 1, (nec 2); nec diag. brev.); nec *Leiostomus xanthurus* Lac., C. et V.

Corvina argyroleuca Günther, ii. 299.

Sciæna xanthurus Gthr., pt. (nec desc.) ii. 288.

Bairdiella argyroleuca Gill, Cat. 33.

Homoprion subtruncatus Gill, (quasi ex Holb.,) Cat. 33.

The principal confusion in the nomenclature of this species is due to Dr. Holbrook, who considered it as “certainly the fish for which Lacépède established his genus *Leiostomus*” and never perceived its identity with the *Corvina argyroleuca* of the Hist. Nat. des Poissons.

Mitchill described it in his memoir on the Fishes of New York,” in the “Transactions of the Philosophical Society of New York,” as *Bodianus pallidus*, as well as *Bodianus argyroleucos*. The first name has been referred by all subsequent naturalists to the genus *Morone* on the authority of Mitchell himself; it is, however, evident that a diagnosis which describes the “tail even—Lateral line extending through it”—“Four or five holes under the chin”—“D. 9—23. A. 12,” cannot be intended for a *Morone*, if the slightest confidence is reposed in the description; on the other hand, it agrees in these respects, as well as others, with the *Bairdiella*, and is unquestionably referrible to that genus, Mitchell himself, to the contrary notwithstanding; Dekay has

* The proper orthography of this name is *Stellifer*. Although the genus of Cuvier is the result of an error originating with Bloch as to the number of branchiostegal rays (4 instead of 7), it will doubtless be adopted, as the other generic characters are appropriate and peculiar.

remarked that he "had the authority of Dr. Mitchill himself for the identity of the species" with the *Labrax pallidus* (= *Morone americana*), and adds, that "there are, however, several grave errors in his description, some of which he assured me were typographical." The *Bodianus argyroleucos* is also undoubtedly the same species, and was characteristically figured by Mitchill.

Holbrook next made the nomenclature still more complicated. He has described and figured it under the name of *Homoprion xanthurus*,—strangely confounding it with the *Leiostomus xanthurus*, and affirming that it was "certainly the fish for which Lacépède established his genus *Leiostomus*." He has in his "specific characters" reproduced the diagnosis and radial formula of *Leiostomus xanthurus* from Cuvier and Valenciennes,* while in the full "description" he correctly describes the fins of *Bairdiella argyroleuca*.† Misled by his "specific characters," and neglecting to read his description of the fins, which I had supposed to be, like most of his others, merely a repetition in words of the radial formula of the diagnosis, I did not recognize its specific identity with *Bairdiella argyroleuca*, although especially alluding to its great resemblance to that fish in an article on the Sciænoids. Shortly after the publication of that paper, the second edition‡ of Holbrook's "Ichthyology of South Carolina," having been received at the Academy during a visit there, I immediately recognized the *Bairdiella* in the figure of *Homoprion xanthurus*, the rays being more distinctly represented than in the figure of the first edition, and consequently the small number at once arresting the attention. It was only then that I was led to examine the extended description of the fins. I have previously demonstrated that Lacépède's *Leiostomus xanthurus* is a true *Leiostomus* as understood by Holbrook, who retains that generic name for a type which he believed was entirely unknown to Lacépède, referring the only species of that author to a new genus!

Genus SCIÆNOPS Gill.

According to Günther, the *Corvina ocellata* or *Johnius ocellatus* of American naturalists, belongs to a different genus from the type of *Johnius*. As it is equally distinct from *Sciæna*, to which it has been referred by Günther, a distinct generic name is requisite: that of *Sciænops* is therefore proposed; the only generic character recognized by Günther, is the weakness of the anal spine in comparison with that of *Johnius carutta*,—the *Corvina carutta* of Günther. The diagnosis of *Johnius* in the "Revision of the Genera of North American Sciænoids" is chiefly applicable to the present genus.

SCIÆNOPS OCELLATUS Gill ex Linn.

Perca ocellata Linn., Syst. N., 483.
Lutjanus triangulum Lac., iv. 181, 217.
Centropomus ocellatus Lac., iv. 257, 279.
Sciæna imberbis Mit., Traus., i. 411.
Corvina ocellata C. and V., 134, pl. 108.
Johnius ocellatus Girard.
Sciæna ocellata Gthr., ii. 289.

Hab.—Caribbean Sea, Gulf of Mexico and Eastern Coast northwards to New York; not found in fresh waters, (contra *Gthr.*, ii. 289.)

*"Body above palest golden-brown; below silvery-white, without spots or bars; tail yellow. D. 11. 1—32. P. 21. V. 1—5. A. 2—13. C. 17."

†D. XI. I. 21. P. 14. V. I. 5. A. II. 9. C. 17.

‡Dr. Holbrook, influenced by the hope of reclaiming the first edition of his work, has rendered the procurement of the second edition almost impossible by his order to his publishers, to only exchange the one for the other.

Genus MENTICIRRHUS Gill.

I. Body with oblique bands.

* Oblique bands only ; six procurent downwards under dorsals. Third dorsal spine shorter than head... *M. alburnus*.

** V-shaped band pointed downwards under first dorsal, and three oblique procurent ones under second. Third dorsal spine equalling or exceeding length of head..... *M. nebulosus*.

II. Body silvery-white and immaculate *M. littoralis*.

1. MENTICIRRHUS ALBURNUS Gill ex Linn.

Alburnus americanus, &c., *Catesby*.

Leuciscus (12) *Klein*, Fasc., ii. p. 67.

Perca alburnus *L.*, Syst. Nat., 482.

Centropomus alburnus *Lac.*, iv. 249, 257, 264.

Umbrina alburnus *Cuv.*, (1817,) *Holb.* Nec *U. alburnus* *C. et V.*, *Dekay*,

Storer, pp.

Sciæna alburnus *Gronov.*

Hab.—Eastern Coast northwards to New Jersey.

2. MENTICIRRHUS NEBULOSUS Gill ex Mitch.

Sciæna nebulosa *Mitch.*, Trans., i. 408, pl. 3, f. 5.

Umbrina alburnus pp. *C. et V.*, v. 180.

Hab.—Eastern Coast between Capes Cod and Hatteras.

3. MENTICIRRHUS LITTORALIS Gill ex Holb.

Umbrina littoralis *Holb.*, Ich. S. C., 142, pl. 20, f. 1.

Hab.—South Carolina.

Genus MICROPOGON Cuv.

MICROPOGON UNDULATUS C. et V.

Perca undulata *Linn.*, Syst. Nat., 483.

Sciæna croker *Lac.*, iv. 309, 314, 316.

Bodianus costatus, *Mitch.*, Trans. N. S., i. 417.

Micropogon undulatus, *C. et V.*, v. 219.

Micropogon costatus *Dekay*, 83.

Hab.—Eastern Coast south of New York.

In my uncertainty respecting the application of Cuvier and Valenciennes' names, I will not venture further on the synonymy. I am acquainted autotically with only a single species as an inhabitant of the Eastern Coast, but there are, from the Gulf of Mexico, South America, &c., in the Smithsonian Institution's Collection, several differing in the form and size of the head, squamation, anal fin, &c.

Subfamily HAPLOIDONOTINÆ Gill.

Genus POGONIAS Lac.

Pogonathus *Lac.*

1. POGONIAS FASCIATUS Lac., iii. 137.

Labrus grunniens *Mitch.*, Trans. N. Y., i. 405, pl. 3, f. 3.

Hab.—Rhode Island southwards.

2. POGONIAS CHROMIS C. and V. ex L.

Labrus cromis *L.*, Syst. N., 479.

Sciæna chromis *Bl.*, *Schn.*, 82 ; *Lac.*, iv. 314.

Pogonathus courbina *Lac.*, v. 121.

Sciæna gigas *Mitch.*, Trans. N. Y., i. 412, pl. 5, f. 10.

" *fusca* *Mitch.*, l. c., 409.

Pogonias chromis.

Hab.—New York southwards.

1863.]

Subfamily *LIOSTOMINÆ* Gill.Genus *LIOSTOMUS* Lac.*LIOSTOMUS XANTHURUS* Lac.

Leiostomus xanthurus Lac., iv. 439, pl. 10, f. 1; *C. et V.*, (*Gthr.*, in Syn. pt.)
Homoprius xanthurus Holb., 170, (syn. et sp. ch.; nec desc. et fig.;) nec
 pl. 24, f. 2.*

D. XI. 1, 32—34. A. II. 13.

Color uniform.

Hab.—South Carolina to New York.

LIOSTOMUS OBLIQUUS Dekay ex Mit.

Mugil obliquus Mitch., Trans. N. Y., i. 405.

Sciæna multifasciata Les., Journ. Ac. N. S. Pa., ii. 225.

Leiostomus humeralis C. and V., v. 141, pl. 110.

" *obliquus* Dekay, 69, pl. 60, f. 195; Holb., 164, pl. 24, f. 2, (nec f. 1.)

D. X. I. 30. A. II. 13.

Obliquely multifasciate; humeral spot.

Hab.—Eastern Coast northwards to Massachusetts.

Subfamily *LARIMINÆ* Gill.Genus *LARIMUS* Cuv. et Val.*LARIMUS FASCIATUS* Holbrook.

Larimus fasciatus Holb., 153, pl. 22, fig. 1.

Hab.—South Carolina, in salt water, (not fresh.)

Subfamily *OTOLITHINÆ* Gill.Genus *CYNOSCION* Gill.

Cestreus Gronov., nec Cuv. et Val.

I. Body slender, spotted above as well as on the fins..... *C. carolinensis*.

II. Body slender, with faint, oblique straight on back

* Belly white *C. regalis*

** Belly yellow..... *C. thalassinus*.

III. Body robust, immaculate..... *C. nothus*.

1. *CYNOSCION CAROLINENSIS* Gill ex C. V.

Otolithus carolinensis C. V., ix., 475.

Cestreus carolinensis Gronov., ed. Gray, 49.

Hab.—Northwards to New York.

2. *CYNOSCION REGALIS* Gill ex Bl.

Johnius regalis Block, Schu., 75.

Roccus comes Mitch., Rep.

Labrus squeteagne, Mitch., Trans. N. Y., t. 396.

Otolithus regalis C. V., v. 67.

Hab.—Northwards to Maine.

3. *CYNOSCION THALASSINUS* Gill ex Holb.

Otolithus thalassinus Holb., 132, pl. 18, p. 2.

Hab.—South Carolina.

4. *CYNOSCION NOTHUS* Gill ex Holb.

Otolithus nothus Holb., 134, pl. 19, f. 1.

Hab.—South Carolina.

*The pl. 24, f. 2, referred to for this species by Holbrook, who has thus led Guenther into error, is the *L. obliquus*; the fig. meant to be referred to represents *Bairdiella pallida*.